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ABSTRACT

The process, activities, and outcomes of a plan for the development, implementation, and evaluation of a statewide coordinated system for nursing education in Kentucky are described. The background and objectives of the 5-year Kentucky Nursing Education Project are discussed, along with the following project components: organizational base, assessment of educational resources and nursing manpower resources, projections of nursing manpower needs and resources, educational planning, educational development, and project evaluation. The studies are summarized in terms of their purpose, process, and major findings. Data generated through project activities facilitated educational planning, including review/approval of ongoing and new programs and degrees. Nursing conferences were also held to share information and expand the communication network, which are integral parts of educational planning. Educational development was facilitated by mini-grants to schools of nursing, identification of continuing education needs, and a delineation study of nursing that specified nursing competencies. Recommendations based on the findings of the various studies are included. (SW)

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KENTUCKY
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NURSING EDUCATION PROJECT

KENTUCKY NURSING EDUCATION PROJECT: FINAL REPORT AND RECOMMENDATIONS

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COUNCIL ON HIGHER EDUCATION
FRANKFORT, KENTUCKY
AUGUST 1982

Kentucky Nursing Education Project
Final Report

This project was made possible
through a grant from the
W. K. Kellogg Foundation

Council on Higher Education
Frankfort, Kentucky

Harry M. Snyder
Executive Director

August, 1982

FOREWORD

This final report of the Kentucky Nursing Education Project summarizes the process, activities and outcomes of a multi-faceted plan for the development, implementation and evaluation of a statewide coordinated system for nursing education. The project, begun in September 1977 and concluded in August 1982, was jointly funded by a grant of $232,048 from the W. K. Kellogg Foundation, and by Kentucky's coordinating agency for higher education, the Council on Higher Education. Findings of the various project studies have influenced decisions regarding nursing education in Kentucky and can serve as guidelines for future decisions regarding the education and utilization of nurses in Kentucky's educational and health care systems.

Acknowledgement and appreciation are extended to the W. K. Kellogg Foundation for their generous support of this project, and to the many individuals who gave so freely of their time and talent to bring the project to fruition.

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Planning must be founded on a clear understanding of existing conditions and future trends in 1) nursing, 2) higher education, and 3) other health services and professions.

Lucille Petry Leone
from Statewide Planning for Nursing Education, 1967.

1 INTRODUCTION

The primary goal of the Kentucky Nursing Education Project has been to develop, implement and evaluate a statewide coordinated system for nursing education in Kentucky. The impetus for an endeavor of this type under the auspices of a Kentucky state agency was provided a decade ago through legislation.

Background

In 1972 the Kentucky General Assembly broadened the statutory authority of the Council on Public Higher Education and clarified its role and responsibilities as the state coordinating agency for public higher education. (The name of the agency was subsequently changed to Council on Higher Education.) As described in Kentucky Revised Statute 164.020, the Council's charge included analysis and research of higher education needs, comprehensive plans to meet those needs, approval of graduate degree programs and programs requiring regional or national accreditation and leading to licensure or certification, and, institutional budget review.

Following this legislation, and in considering approaches to comprehensive planning for higher education, attention was drawn to the need for "cooperative and coordinated planning in the field of health sciences education." (Council on Public Higher Education, 1975, p.1). A plan emerged for a comprehensive study of health sciences education. Nursing was one of six health disciplines selected for study, and ad hoc study groups for each discipline were subsequently convened under the direction of the Council's Health Sciences Advisory Committee.

By 1975 the Ad Hoc Study Group on Nursing had completed its study. Seven issues of concern in nursing had been identified, and recommendations formulated for resolution of those issues:

ISSUE NO. 1

THERE IS NO PLAN FOR COORDINATION BETWEEN AND AMONG THE INDIVIDUAL NURSING EDUCATION PROGRAMS IN KENTUCKY.

RECOMMENDATIONS:

1. The Council on Public Higher Education should establish a standing Nursing Education Advisory Committee. This Committee would function in an advisory capacity to the Health Sciences Advisory Committee in all matters relating to nursing education and fulfill a primary nursing education planning function for the Council on Public Higher Education.

2. An eminently qualified nurse educator should be added to the Health Sciences staff of the Council on Public Higher Education to provide staff support for all Council matters relating to nursing education.

3. Each of the institutions engaged in nursing education should be encouraged to cooperate in the development of a comprehensive plan for a system of nursing education under the aegis of the Council on Public Higher Education. The plan should provide for the preparation of graduates for all levels and types of nursing practice. While participation in the system should be voluntary and each program should be afforded the opportunity to choose its own role and make its own unique contribution, at the same time each program should function as a coherent part of a total system with an identified mission directly related to the overall nursing manpower needs of the state.

ISSUE NO. 2

THERE IS NO BROADLY ACCEPTED DEFINITION OF THE LEVEL OF EDUCATION OR PRACTICE ROLES FOR THE GRADUATES OF THE VARIOUS TYPES OF NURSING PROGRAMS.

RECOMMENDATIONS:

1. The Council on Public Higher Education, through its Nursing Education Advisory Committee, should provide a forum for nursing education and nursing service to work cooperatively to explore, define, and plan for the education and utilization of the different categories of nursing personnel essential to the delivery of quality nursing care in an expanding health system.

2. The Council on Public Higher Education, through its Nursing Education Advisory Committee, should support in-depth research activities to determine what nursing functions are essential to provide quality nursing care based on the needs of the patient and determine what categories of nursing personnel are needed to provide this care.

3. The Nursing Education Advisory Committee should determine appropriate educational programs to prepare the various categories and numbers of nursing personnel identified by the study.

4. The Council on Public Higher Education should communicate its future recommendations on the utilization of levels of nursing personnel to institutional accrediting and licensing agencies. The Committee should encourage these agencies to assure the proper utilization of nursing personnel by including utilization criteria in the institutional accrediting or licensing process.

ISSUE NO. 3

ALTHOUGH INSTITUTIONS MAY OFFER SOME PROVISIONS FOR UPWARD MOBILITY THERE IS NO FORMAL SYSTEM IN NURSING EDUCATION IN KENTUCKY TO PROVIDE FOR CAREER MOBILITY THROUGH THE EDUCATIONAL PROCESS WITHOUT UNDUE LOSS OF TIME AND/OR CREDIT.

RECOMMENDATIONS:

1. The Council on Public Higher Education should encourage the development of a plan for a coordinated system of nursing education in Kentucky's post-secondary institutions in which each program fulfills the entry level content for the next higher level of education so that students may be awarded credit for previous education.

2. Nursing education should develop a statewide plan for the use of competency based challenge examinations to provide for advanced standing in post-secondary institutions which minimize loss of time and credit.

3. The Council on Public Higher Education should encourage the development of a cooperative system of nursing education with carefully planned, articulated nursing programs to minimize expense, loss of time and credit, and duplication of content between two year and four year programs.

ISSUE NO. 4

THERE IS AN INSUFFICIENT NUMBER OF NURSES IN KENTUCKY WITH GRADUATE DEGREES TO ASSUME LEADERSHIP ROLES IN EDUCATION, ADMINISTRATION, AND CLINICAL PRACTICE.

RECOMMENDATIONS:

1. The Nursing Education Advisory Committee should determine how graduate level education needs in Kentucky can best be accomplished. As needs can be quantified, this Committee should make recommendations to the Council on Public Higher Education regarding the role and status of the present graduate program at the University of Kentucky and the development and placement of new graduate programs in keeping with regional needs and resources. The opportunity for the development of cooperative programs for decentralized graduate education between the two Health Sciences Centers, Regional Universities, and other appropriate educational institutions, should be carefully explored.

2. Because the two University Health Sciences Centers possess unique resources in health facilities and faculty expertise in multiple health disciplines, each center should concentrate its efforts on baccalaureate and graduate programs in nursing. Both institutions should cooperate in planning for graduate education in nursing, develop cooperative use of nursing faculties where possible, and minimize unnecessary duplication of graduate program efforts.

3. The University of Kentucky should expand its graduate program in nursing immediately to help meet pressing statewide needs for nurses with advanced education. Such expansion should be conditional upon producing a balance between baccalaureate and graduate positions in relationship to the University of Kentucky's role in meeting overall nursing manpower needs in the state.

ISSUE NO. 5

PRESENTLY THERE IS NO COORDINATED STATEWIDE PLAN FOR CONTINUING EDUCATION OF NURSES IN KENTUCKY.

RECOMMENDATION:

The Council on Public Higher Education should develop and coordinate a statewide plan for continuing education in nursing, with a focus on providing programs to assist nurses to achieve and maintain competency in their area of nursing practice.

ISSUE NO. 6

THERE IS PRESENTLY NO ADEQUATE METHOD FOR COLLECTING COMPREHENSIVE AND CONTINUOUS NURSING PERSONNEL DATA, EXCEPT DEMOGRAPHIC DATA WHICH DO NOT RELATE THE UTILIZATION AND NEED FACTORS TO TYPE, NUMBER, AND GEOGRAPHIC DISTRIBUTION OF NURSES.

RECOMMENDATION:

The Council on Public Higher Education should support the establishment of a Central Health Information Data System to meet the needs of all agencies, institutions, and professional associations concerned with planning, finance, education, manpower control, licensure, and administration of health service programs. A designated state agency, organization, or institution should be assigned the responsibility, with concomitant authority and resources, to collect, collate, store, and disseminate data pertaining to nursing manpower and education.

ISSUE NO. 7

CURRENT LEGISLATION FOR EDUCATION PROGRAMS WHICH CONCERN NURSING CREATE OVERLAPPING RESPONSIBILITIES AMONG MULTIPLE STATE AGENCIES.

RECOMMENDATION:

The Legislative Research Commission should be requested to conduct a critical review of those sections of the Kentucky Revised Statutes pertaining to nursing education and practice, and to recommend legislative changes which would eliminate duplicative legislative responsibility and authority between and among educational institutions, regulatory boards, and other state agencies.

In response to these issues and recommendations, the Council on Higher Education endorsed the formulation of a project proposal by representatives of the Ad Hoc Study Group to develop a statewide coordinated system of nursing education. This proposed project was to be influenced by a concurrent study conducted by the Southern Regional Education Board.

During the period that the Kentucky nursing study was in progress, the Southern Regional Education Board's Council on Nursing was completing a major study of nursing education. This SREB Nursing Curriculum Project, reported in the Pathways To Practice series (Haase, Smith and Reitt, 1973-1976), included an identification of nursing competencies appropriate to the educational levels of nursing education, and provided a blueprint for future educational development in a changing society. A major recommendation of this study referred to the development of a system of nursing education which prepared graduates for different levels and types of nursing practice (Haase, 1976).

In addition to funding the Nursing Curriculum Project, the W. K. Kellogg Foundation had made funds available to the SREB's Council on Nursing to assist states to conduct different types of projects related to the Nursing Curriculum Project. The Kentucky Ad Hoc Study Group on Nursing was cognizant of the relevance of the Kentucky Study findings to the SREB study. Representatives of the Kentucky Study group with Council on Higher Education staff proceeded to develop a nursing education project proposal for submittance to the W. K. Kellogg Foundation through the SREB Nursing Curriculum Project.

Kentucky Nursing Education Project Objectives

The objectives of the proposed project were designed to develop the base for continuing efforts in Kentucky to improve the quality of nursing care, increase program effectiveness and improve career mobility options for nurses. They reflected the issues and recommendations of the Kentucky Phase I Study as well as the recommendations of the SREB Nursing Curriculum Project:

1. To develop a statewide system of nursing education which incorporates the components identified by the SREB Curriculum Project and allows for career mobility through all segments of the system.

2. To develop a statewide system of continuing education for nurses to provide for career advancement of nurses, through other than formal degree-granting programs.

3. To coordinate systems with the authorized regulatory and planning agencies in the Commonwealth, to maximize the proper utilization of nurses in all aspects of health care delivery.

4. To prepare the tools for evaluation of the statewide system of nursing education, to determine the following:

    a. The efficiency of the system in providing for career mobility.

b. The preparation of nurses in consonance with the health care needs and the health care delivery systems in the Commonwealth.

c. The degree of, and effectiveness of, the interdigitation between and among the various programs of nursing education.

d. The geographic distribution of nurses as this relates to areas of need.

e. The effective utilization of nurses in the health care delivery system.

5. To identify areas where nursing research is needed to determine improved methods of nurse utilization and nursing education in the Commonwealth.

The plan of action extended over a three-year project period but implied continuation of the system of nursing education and research studies.

The project proposal was submitted to the W. K. Kellogg Foundation in May 1977, and approved for funding beginning in September 1977.

In the meantime the Council on Higher Education acted upon two of the recommendations of the Ad Hoc Study Group on Nursing in reference to:

ISSUE NO. 1

THERE IS NO PLAN FOR COORDINATION BETWEEN AND AMONG THE INDIVIDUAL NURSING EDUCATION PROGRAMS IN KENTUCKY.

The Council established the Subcommittee on Nursing Education to serve in an advisory capacity to Council staff, and convened the group for an organizational orientation in November 1976. Several of the appointees had served on the Ad Hoc Study Group on Nursing--a factor which enhanced continuity of planning efforts. In July 1977, the Council employed a nurse educator on its staff to address nursing education matters and to direct the proposed nursing education project.

The Kentucky Nursing Education Project enlisted the assistance of many individuals, generated numerous activities and studies, and was extended from three to five years using the original grant funds. At times the project appeared to be a giant jigsaw puzzle with players crossing paths to search, select, fit, the seemingly unrelated pieces into a cohesive whole. At any given time numerous activities were ongoing simultaneously. To summarize events sequentially would be neither profitable nor possible.

In the beginning two priority objectives were identified: to update relevant data, and, to establish a supportive and effective communication network. Site visits to colleges, universities, hospitals, professional associations and other state agencies during the first year of the project became a means by which both objectives could be pursued. The renewal of meetings with the Subcommittee on Nursing Education following the initial meeting in November, 1976, established the foundation for continuing development of these and all other project objectives.

Description of the Nursing Education System

The ultimate goals for the nursing education system in Kentucky are reflected in the following description:

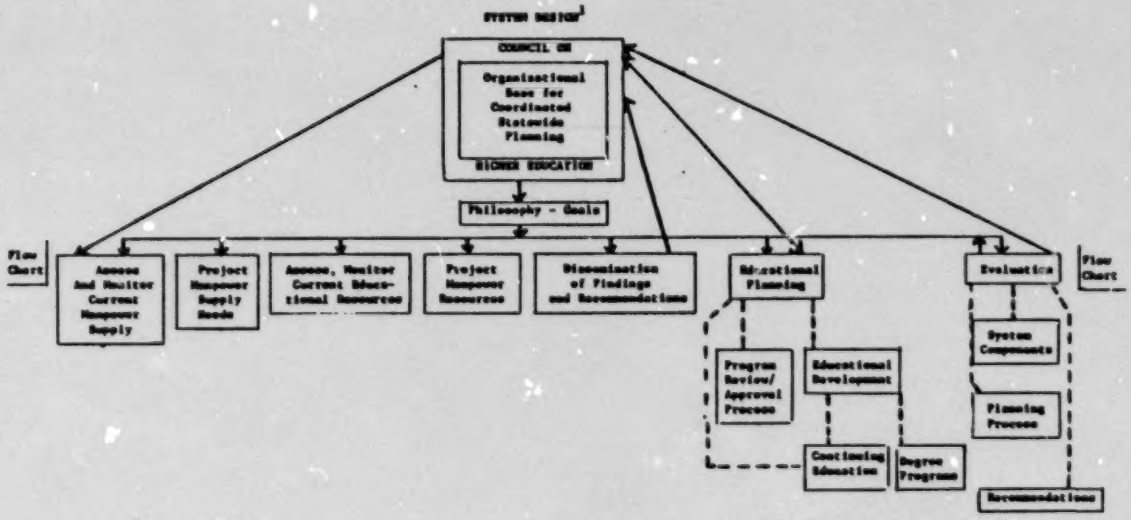
> The system of nursing education is one which is coordinated statewide, integrated within the broader system of higher education, responsive to the educational and nursing service needs of Kentucky's citizenry, compatible with the public and private resources of the state, adaptable to changing requirements, and, sensitive to socioeconomic trends which affect it.
>
> Envisioned is a dynamic system which will demonstrate excellence in education, research and practice, maximize educational accessibility and educational level articulation for students, eliminate unnecessary duplication of programs, and, promote effective and efficient utilization of resources.

Although the project proposal had stipulated the full process of development, implementation and evaluation of a statewide coordinated system of nursing education over a three-year period, it soon became evident that a cohesive, well-articulated educational system should be pursued on a long-term basis. Statewide planning for nursing education should be a continuous process for effective response to ongoing change and preparation for future needs (Leone, 1967).

System Design

A problem solving process-oriented design was formulated to identify the major components of an educational system and a process for continued functioning of the system (Figure 1). Project activities (discussed later in this report) were designed for each of the major components and computer programs were developed for sub-processes indicated for ongoing use. Various activities related to the project were also generated by individual members of the Subcommittee on Nursing Education through their institution and/or professional association. The system design permits and promotes ongoing development, refinement and coordination of nursing education in Kentucky.

FIGURE 1



[1]A system is defined as the orderly organization of parts to make a whole in such a manner that each part is related to every other part, so a change in one part of the whole affects every other part, with each part and the totality of all parts functioning to produce specified outcomes.

Source: T.A. Ryan and F. R. Zeran. Organization and Administration of Guidance Services. Danville, Illinois: Interstate Printers and Publishers, 1972, p 13.

Revised 11/80

Outcome Highlights

.A planning/coordination communication network among institutions, professional associations, regulatory and higher education agencies representative of nursing and related components of the educational and health care systems has been established and through which problems and issues of the nursing education system can be addressed.

.A nursing manpower requirement projections computer program specific to Kentucky has been developed based on the state model for nursing manpower requirement projections developed under the auspices of the Western Interstate Commission on Higher Education. The program reflects differentiation of levels of nursing education preparation, practice roles and practice settings; can be modified to reflect changes in Kentucky-specific data; and, can be repeatedly used to update nursing manpower requirement projections.

.Nursing manpower requirements and resources for Kentucky have been identified for the years 1981 and 1985.

.A process for the periodic assessment and monitoring of nursing manpower licensed in Kentucky has been established.

.A process for periodic broad assessment of nursing education programs and identification of factors adversely affecting program productivity has been established.

.A pilot delineation study of the nursing discipline is nearing completion and provides a base for curriculum development/revision and nurse staffing decisions for current practice in the areas of education, clinical practice, administration and research. The study is designed to describe the tasks of nursing practice, identify the skills and knowledge of each task of nursing, ascribe the level of complexity of each skill and knowledge, and identify the appropriate placement of delineation factors within the educational system.

.There is increased awareness and acceptance of a statewide coordinated approach to nursing education.

.There is improved accessibility to nursing education as evidenced by outreach programs and establishment of new programs in needed areas.

.There is rational planning for nursing programs according to need, geographical area and resource capability.

.There is increased effectiveness in inter-institutional/ organizational communication for educational planning and coordination purposes.

. There is expanded involvement of nurses in addressing educational problems and nursing practice issues which have implications for educational planning.

Council on Higher Education

The organizational base for the nursing project has been a planning/coordinating structural unit having broad representation from the community, higher education and the health care delivery system. Placed under the sponsorship of the Council on Higher Education, the project and its organizational unit have functioned under the policies of the Council.

The selection of the Council on Higher Education, Kentucky's coordinating agency for higher education, to insure a statewide plan for nursing education, was a logical choice. As Leone (p. 4-5) pointed out:

> "Planning for nursing education is best done by a body with official status in state government, largely because such an arrangement has the greatest potential for turning plans into action. It has the wherewithal, the status, and the power to accomplish what it sets out to do.
>
> An official state body has the potential ability to integrate its plans with other statewide efforts in health and education; to attract an expert staff; to have access to information which will permit a comprehensive view of the problems; to have adequate financial support; and to have clear channels for submitting its recommendations."

The Council and its standing committees have provided an organizational vehicle through which nursing project data could be channeled and recommendations acted upon. Council and committee membership are a direct communication linkage with educational and health care administrators and citizen leaders from throughout the state, while the coordinating functions of the Council permit project (Council) staff to serve in facilitating roles for the achievement of stated objectives.

Subcommittee on Nursing Education

The Subcommittee on Nursing Education has been the organizational strata having direct linkage to nursing and the health care system. Formed in 1976, this Subcommittee has continued to function in an advisory capacity to Council staff, meeting quarterly as a group but also participating in special task forces on a more frequent basis. The committee has provided in-depth knowledge and continuity in addressing issues, plans and events which affect nursing education in Kentucky.

Professional representation on the committee has remained the same since its inception, but with the addition of a continuing education representative in 1978. The majority of the eighteen members have been recommended for appointment to the committee by their sponsoring organizations. The two members representing nursing service, who have been on the committee since 1976, and the continuing education representative, were selected by Council staff. Since 1976 a total of forty-three persons have served on the Subcommittee on Nursing Education with the following organizational representation:

- State universities having nursing programs (eight members representing eight universities)
- State community college system (one member representing thirteen colleges having nursing programs)
- Council of Independent Kentucky Colleges and Universities (one member representing seven colleges having nursing programs)
- Bureau of Vocational Education (one member)
- State Board of Nursing (one member)
- Kentucky Nurses' Association (one member)
- Kentucky League for Nursing (one member)
- Kentucky Hospital Association (one member)
- Field of nursing service administration (two members)
- Field of continuing education in nursing (one member)

The communication network centered in the organizational base of the nursing project has been under continual expansion and refinement. Subcommittee members have strengthened the evolving system for nursing education through productive participation in committee meetings, additional high-level involvement in technical advisory groups addressing nursing project objectives, and by initiating activities within their professional orbit which were compatible with project goals. Various members have independently conducted studies and projects concerning public health nursing and outreach programming in a qeneric baccalaureate program, and have arranged organizational cells for nursing program directors in independent colleges as well as continuing education planners from university settings throughout the state. Each Subcommittee member has served as a resource person for information of nursing project activities and goals to their individual communities as well as their professional constituents. An intangible yet recognizable outcome of Subcommittee involvement in the nursing project and the concomitant communication network is the mutual trust which has evolved--an ingredient essential to positive and coordinated, planned growth of the nursing education system.

Council staff, through their immediate and daily involvement in the nursing project and in the educational responsibilities vested in the Council, have served as a pivotal point within the organizational base for leadership in project activities and as an informational resource. Support services for the myriad of tasks necessary to an endeavor such as the nursing project have been provided by Council staff and also in many instances, in cooperation with other organizations and individuals who provided primary data.

The organizational base within which the nursing project has been centered should continue to function in accordance with the statutory authority of the Council on Higher Education for educational planning, and with the commitment of nurses and other health care planners to sound and progressive development of the nursing education system.

Purpose

An annual assessment of licensed nursing manpower in the state has been considered essential to long-term planning and development of the nursing education system in Kentucky. The assessment has served several broad purposes:

- It has enabled a comparison to be made between current nursing manpower resources and current nursing manpower requirements;
- It has provided a documented base from which to project probable future nursing manpower resources; and
- It has provided a base for identifying trends in the nursing manpower pool.

The assessment of licensed nursing manpower is an initial step towards rational planning of nursing education programs and the production of the numbers and types of nurses estimated to be needed within the State.

Process

Although state-level totals of active and inactive licensed nurses have been issued annually by the Kentucky Board of Nursing, the objectives of the Nursing Project required a closer examination of the dimensions of the licensed nurse population in Kentucky. The Project staff, with access to computer services, undertook the task of the assessment of licensed nursing manpower with the cooperation of the Kentucky Board of Nursing.

The first assessment, in 1978, focused on registered and practical nurses employed in nursing in Kentucky. During the following year it became evident that a more thorough analysis of licensed nursing manpower should be done, and that the data summary should be tabulated on the same date each year for trending purposes.

From 1979 through 1981 a tabulation of nurse licensure data was made in the first week of July. The computer program (Fortran) permitted examination of combinations of selected variables resulting in composite summaries of licensure data from varying perspectives. The variables selected

include the following:

Personal	Age	Employment Status	Employed in Nursing:
	Sex		Full-Time
	Marital Status		Part-Time
	Race		Unemployed
	Social Security Number		Employed in field other than nursing
Licensure Status	Active		
	Inactive	Place of Employment	Name
			Address
Demographic	Home State		
	Home District (KY)	Field of Employment	Hospital
	Home County (KY)		Nursing Home
			School of Nursing
Highest Educational Level Attained	For RN:		Private Duty
	Hospital Diploma		Public Health
	Associate Degree		School Nurse
	Baccalaureate in Nursing		Industrial
	Baccalaureate in Other Field		Office Nurse
			Other
	Masters in Nursing		
	Masters in Other Field	Type of Position	Administrator/Assistant
			Consultant
	Doctorate		Supervisor/Assistant
			Instructor
	For LPN:		Head Nurse/Assistant
	Years of High School completed 0 - 4		General Duty/Staff
			Other
	High School Equivalency		
	High School Diploma	Advanced Nurse Practitioner Specialty	Anesthetist
	Associate Degree in Nursing		Clinical Specialist
			Nurse-Midwife
	Baccalaureate in Nursing		
	Baccalaureate in Other Field		

These data are drawn from the information submitted by individual nurses when they first apply for Kentucky licensure as an RN or LPN, and when they renew their license to practice for the following year. However, as was stated in the Nursing Project report, Study of Nursing Manpower Requirements and Resources in Kentucky 1981 and 1985, (Council on Higher Education, 1982, p. 74): "In using nurse licensure records as a manpower data source, several points should be noted:

.Nurse licensure data is self-reported and not routinely validated, but assumed to be correct.

.Al. nurses holding licensure in Kentucky are not necessarily on active status.

.All Kentucky-licensed nurses having active status are not necessarily employed in nursing.

.All Kentucky-licensed nurses on active or inactive status do not necessarily reside in or near Kentucky."

These points are illustrated in the analysis of July 1981 licensure data. Of the 25,354 registered nurses licensed in Kentucky:

.59.5% were on active status and employed in nursing in Kentucky.
.25.0% were on active status but lived and/or worked outside of Kentucky.
.15.5% were on inactive status, with almost two-thirds of that number living outside of Kentucky.

For project purposes the focus has been primarily on nursing manpower actively licensed in Kentucky and employed in nursing in Kentucky. These data were tabulated to show actual nursing manpower resources for the State, Area Development Districts and Counties according to highest educational level by field of practice, position, and age, and are reported in Nursing Manpower Licensed in Kentucky 1979-81. (Council on Higher Education, 1982).

Findings

The assessment and analysis of nursing licensure data from July 1979 to July 1981 show that the manpower pool of registered nurses employed in nursing in Kentucky has been increasing by approximately 1000 RNs (headcount) per year, but converted to full-time employment equivalency (2 part-time RN = 1 full-time RN), the increase is 808.5 FTE RNs. When this employed nursing manpower was compared with the number of new nurses graduated the previous year(s), the increase in the nursing manpower pool averaged 58 percent less than the increase in the number of new nurses graduated. (Council on Higher Education. Report to National Commission on Nursing, 1981, p.6.). The questions arising from this finding remain unanswered, but indicate an area for further research.

Examination of the educational level variable from 1979-81 shows that the percent of registered nurses reporting the hospital program diploma as their highest level of preparation is decreasing, while the percent of nurses prepared in collegiate programs is increasing. This finding reflects both the

national and state trends of closures of hospital diploma programs, and the growth of collegiate nursing programs in Kentucky over recent years. In contrast, the percent of nurses in administrative and supervisory positions who are prepared at the baccalaureate and higher degree levels did not increase significantly from 1979 to 1981. The "highest educational level attained" variable in licensure data can serve as a measure of nursing program productivity effectiveness as well as an indicator for needed growth within the nursing system.

Utilization of Data

Nurse licensure data has been a valuable source of information, and essential for some aspects of planning within the health care field. It has been made available, in aggregate numbers, to numerous health care agencies and educational institutions as a factor in decision-making regarding hospital development/expansion, staff recruitment, student recruitment, program planning and surveys of various types.

Licensure data take on added meaning when compared with a relevant standard. For example, the 1981 Kentucky licensure data showed the highest educational level attained of employed registered nurses to be:

75.1% hospital diploma/associate degree (37.4% Dip/37.2% ADN)
17.1% baccalaureate degree in nursing
2.6% master's degree in nursing
0.3% doctoral degree
4.4% baccalaureate or masters degree in discipline other than nursing
0.3% unknown

However, when compared with the educational level of nurses estimated to be required in 1981 (Study of Nursing Manpower Requirements and Resources in Kentucky 1981 and 1985), a different picture emerges:

Level	1981 Required	1981 Licensed	+ Surplus/ - Deficit
Diploma/Associate Degree	41.9%	75.1%	+ 33.2%
Baccalaureate in Nursing Degree	37.5%	17.1%	- 20.4%
Master's in Nursing Degree	19.5%	2.6%	- 16.9%
Doctoral Degree	1.0%	0.3%	- 0.7%

Graduation data are another measure which can be compared with licensure data to show relative impact of program productivity upon the nursing manpower supply. It is assumed that the educational level of Kentucky nursing program graduates of one year will be reflected in the Kentucky licensure data of the following year. In comparing 1980 and 1981 licensure data with 1980 graduations (Study of Nursing Manpower Resources and Requirements 1981 and 1985, p.79) the following information emerges:

. The number of BSN-prepared registered nurses employed in nursing in Kentucky increased by 237 from 1980 to 1981.

- There were 371 new graduates of all Baccalaureate in Nursing degree programs in Kentucky in 1980.

- Therefore the 1980-81 increase in the number of baccalaureate prepared nurses in the employed nurse manpower pool was 36.1% (N=134) less than the number of baccalaureate program nursing students graduated in 1980.

- The number of MSN-prepared registered nurses employed in nursing in Kentucky increased by 64 from 1980 to 1981.

- There were 50 new graduates of Masters in Nursing degree programs in Kentucky in 1980.

- Therefore, the 1980-81 increase in the number of master's prepared nurses in the employed nurse manpower pool was 21.8% (N=14) more than the number of master's program nursing students graduated in 1980.

It cannot be assumed that new nursing program graduates are leaving Kentucky following graduation. Other factors, i.e. retirement, in-and out-migration, may also be affecting the existent nursing manpower pool. Instead, the information implies the need for further research.

Licensure data has served as one factor in decision-making in Nursing Project activities as well as in work force and educational planning by others who have accessed the information. It has become an important part in the complex process of developing, implementing and evaluating a coordinated system for nursing education.

5 PROJECTION OF NURSING MANPOWER NEEDS

Purpose

In planning and developing the nursing education system for Kentucky, one which would meet the needs of the State, some fundamental questions required answers: How many nurses will be needed in the various practice settings represented in the health care system? What types of educational preparation should those nurses have? What "mix" of differently prepared nurses can best meet the needs? Leone (1967, p.11), spoke to this aspect of statewide planning when she stated:

> "A clear understanding of the requirements and potentialities of each type of program is needed in order to understand trends in nursing education, and to make decisions about which trends should be reinforced to produce the number and kinds of nurses needed in each state. Decisions about creating new programs, and modifying or closing others, also rest on a clear understanding of each type of education and institution."

Statewide planning for nursing education has been of national interest for many years. As major changes occurred in nursing education and in the complexity of nursing practice, greater attention was given to distinguishing between levels of nursing education and nursing practice for planning purposes. By 1975 in Kentucky, the need to qualify future needs for nurses, with distinctions made between educational/practice levels, had been clearly identified and recommended for action.

Process

The model selected to project the numbers and types of nurses needed in future years was designed specifically for state level use. Known as the "WICHE" model, and developed by the Western Interstate Commission for Higher Education and the National Center for Higher Education Management Systems, the model originated in response to a federal mandate "to determine the projected requirements, supply and distribution of nurses 'within the United States and within each State'." (Gray and Sauer, 1978).

The "WICHE" model is population-based and provides for nursing manpower requirement calculations for differing practice settings and positions by nursing education level. Staffing calculations are based on the criterion that 4.9 full-time equivalent (FTE) nurses are required to staff a unit twenty-four hours per day for one year.

The "WICHE" model was modified for use in Kentucky. A technical advisory group representing major facets of the health care and educational systems was appointed to work with Council staff in reviewing the model and adapting it to Kentucky-specific data. Although basic formulae for calculating nurse requirements in the "WICHE" model were retained, modifications were made in health care facility classifications, staffing patterns and educational vector percentages to reflect Kentucky data and the beliefs and assumptions held by the TAG members about nursing education and health care. Modifications were then referred to the Subcommittee on Nursing Education for approval and/or further modification. The resulting modified nurse requirement projection model, now named the Kentucky model, was converted to a computer program for ease and accuracy of use, and availability for future use.

The original projection model permitted a range of requirement projections called "lower bound" and "upper bound." These terms were retained in the Kentucky model, with requirement projections calculated for each practice setting and position at the State and Area Development District levels for the year 1981, and for the State level only for the year 1985.

Findings

The nurse manpower requirements projected for 1981 were compared with the analysis of the 1981 nurse licensure data, resulting in specific surpluses and shortages identified in the nursing manpower supply according to requirement model criteria. Among the major findings at the state level for the lower bound parameter were the following:

.An overall shortage of 6039.1 FTE RNs (-31%)
.A surplus of 2245.9 FTE Associate Degree/Diploma RNs (+28%)
.A shortage of 4945.2 FTE Baccalaureate Degree RNs (-68%)
.A shortage of 3225.0 FTE Master's Degree RNs (-85%)
.A shortage of 161.3 FTE Doctoral Degree RNs (-81%)
.A surplus of 2212.5 FTE Licensed Practical Nurses (+55%)

Nurse requirement projections for 1985 indicate the need for a total F.T.E. RN population of 20,087.4. This projection is 709.3 FTE RNs over the number of RNs projected as required for 1971 (19378.1 FTE RNs). The 1985 requirement projection for LPNs is 4,213.3 FTE LPNs, and represents an increase of 195.8 FTE LPNs over the 4017.5 FTE LPNs projected for 1981.

A detailed report of the nursing manpower requirements model, the calculations obtained and the findings appear in the Council on Higher Education publication, Study of Nursing Manpower Requirements and Resources in Kentucky 1981 and 1985, August 1982.

Purpose

During the initial period of the Nursing Project many questions arose regarding Kentucky's nursing education programs. There was no single source for accessing information about applicants, enrollment, program articulation policies, and other factors relevant to statewide educational planning.

The Board of Nursing was authorized to collect data from basic programs, but not from baccalaureate degree programs designed for the registered nurse student nor for graduate degree programs. The Council on Higher Education collected different data: graduations, enrollment by declared majors and student origin. Since all nursing programs offered by hospitals and state and independent institutions of higher education were an integral part of the nursing education system, the need to create an avenue for nursing program data collection was apparent. From this recognized need emerged the nursing program survey of schools of nursing in Kentucky.

Process

Project staff and the Subcommittee on Nursing Education began construction of a survey questionnaire in 1979. Major components of the questionnaire addressed:

- .NLN accreditation status
- .Applicant background in nursing
- .Admissions
- .Enrollment, retention and progression rate
- .Graduations
- .Student residence, age, ethnic group and origin
- .Program enrollment capacity
- .Factors limiting enrollment
- .Student placement policies and tests used

The time period for the information requested extended from the Fall 1979 semester through the Spring 1980 semester.

The questionnaire was sent to all schools of nursing with the request that the forms be completed for each type of program: hospital diploma, associate degree, generic baccalaureate degree, baccalaureate degree for RNs, and, graduate programs. There was 100 percent response to this survey but a close review and tabulations of individual responses indicated that parts of the questionnaire needed revision for the purpose of clarity.

Since the findings of the 1980 survey were questionable, the Subcommittee and project staff revised the questionnaire for distribution in 1981 following the Spring 1981 semester. Again, there was 100 percent response from schools of nursing, with a total of thirty-three programs surveyed. Based on the results of the 1981 program survey, the Subcommittee recommended that the nursing program survey be continued annually, but with items regarding applicant admission and student placement requested biennially.

Findings

The nursing program survey questionnaire was designed to serve as a primary source of information regarding the number and relevant background of applicants; admissions and enrollees; academic articulation policies and practices; demographic factors of enrollees; potential capacity of program facilities; problems associated with attrition; academic articulation and program capacity factors; and, number and outcome of graduations. The information received can be valuable to individual schools of nursing as well as to those addressing statewide development of the nursing education system.

Major findings of the 1981 Nursing Program Survey included the following:

- At least one student from every county in Kentucky began a basic program in Fall 1980.
- Fall enrollments in nursing programs for R.N.'s (baccalaureate and master's degree) increased from 1979 to 1980, while basic program enrollments declined. Spring enrollments for all programs except generic baccalaureate increased from 1980 to 1981.
- None of the five generic baccalaureate programs were operating at capacity enrollment. These programs cited a lack of qualified applicants as the major factor limiting enrollments.
- Associate degree programs were hampered by problems of clinical facility utilization.
- Problems relating to faculty (inadequate salaries, shortage of faculty prepared in specialty areas, and an inadequate number of budgeted faculty positions) affect both baccalaureate and master's degree programs for R.N.s.
- The baccalaureate for R.N. program was the only program level which showed an increase in the number of graduations between 1979-80 and 1980-81.
- Nursing course credit from either a diploma or associate degree program is not accepted by any generic program without validation of prior learning through some form of examination.

- Diploma R.N.s entering R.N. baccalaureate programs at three schools must validate their nursing knowledge by taking ACT-PEP. One baccalaureate for R.N.s program does not accept any nursing course credit or transfer.

Details of this survey are reported in the Council on Higher Education publication, Report of 1981 Nursing Education Program Survey, August 1982.

7 PROJECTION OF NURSING MANPOWER RESOURCES

Purpose

The purpose of estimating nursing manpower resources expected to be available at a given future time is to determine if those resources will be sufficient to meet the estimated need for nursing manpower. Manpower resources refer to the manpower pool expected to be available and employed in nursing based on new nurses entering the pool, retention of nurses already in the pool and net attrition through in- and out-migration.

Process

The projection of nursing manpower resources was included as part of the study on nursing manpower requirements and resources in Kentucky, and are reported in the publication of that name. (Council on Higher Education, 1982.) The resource projection model developed by the Western Interstate Commission for Higher Education (Gray and Sauer, 1978) was used, with some modification, in calculating the expected supply of nurses in Kentucky.

Three sets of data were used in projecting nursing manpower resources:

- Nursing resources from past years (licensure data);
- The number of nursing graduates from past years plus the projected number of future graduates; and
- The "net attrition adjustment"--a rate which measures the effect of various factors on the in- and out-migration of nurses in the work force.

Actual resources in 1981 were obtainable through the annual analysis of nurse licensure data conducted as part of the nursing project. Calculations were based on the variable "highest educational level attained" (of the licensed-registered nurse) and compared with nurse requirements estimated for 1981.

Projected resources for 1985 were calculated for each educational level ranging from practical nurse through the masters degree for registered nurses using licensure data and graduation data. Data from 1979, 1980 and 1981 were used in calculating the net attrition rate while 1981 data were also used as the beginning year for making projections for 1985.

Findings

According to the net attrition rate and subsequent available supply of nursing manpower from 1982 through 1985, the supply of practical nurses, associate degree/diploma registered nurses and baccalaureate degree registered nurses is decreasing while the supply of registered nurses holding masters and doctoral degrees is increasing. Calculations reflect the following: (Study of Nursing Requirements and Resources in Kentucky 1981 and 1985, p. 84-87.)

		RN		
	LPN	AD/DIP	BSN	MSN/DOCT
Available Supply 1981	6863	11866	2584	639
Available Supply 1985	7578	13844	2958	1141
Net attrition rate	-3.5%	-3.07%	-9.35%	+5.56%

NOTE: Supply calculated per headcount

As was noted in Study of Nursing Manpower Requirements and Resources in Kentucky 1981 and 1985 (Council on Higher Education, 1982, p.83), "...The relative merits of the increase and decrease of the nurse supply must be weighed in relation to projected requirements." The conclusion reached in that same study was that: "A continuation of recent patterns of nursing program graduations and annual increases in the nursing manpower pool will not result in the numbers and types of nurses projected to be required in 1985 in the Commonwealth of Kentucky." (p.150).

Program Review/Approval Process

The Council on Higher Education is authorized to review ongoing programs in all disciplines in state institutions of higher education in Kentucky, and to approve/disapprove new program proposals submitted by those institutions. During 1981 the review/approval criteria and processes were updated and refined to reflect changing needs and conditions within the higher education system and the disciplines which comprise that system, and to more adequately accomodate the clinical experience component of the health sciences disciplines. Information generated through the nursing education project contributed substantially to the revision of the program review/approval process.

The review of ongoing and proposed new programs is a function of Council staff, while Council members act upon the recommendations submitted by the staff. The data generated through nursing project activities such as the licensure analysis, program survey, requirements study and various meetings and conferences, have strongly facilitated and strengthened the rationale for planning and approving new nursing programs as well as the expansion of existing programs. The available data base for decisions regarding nursing education programs and unnecessary duplication of programming has been substantially enhanced by the nursing project.

Degree Programs

At the beginning of the nursing education project in 1977 there were a total of twenty-eight nursing education programs leading to a degree in nursing from state and independent institutions of higher education:

1	Master's Degree
5	Baccalaureate Degree (generic)
3	Baccalaureate Degree (for registered nurses)
19	Associate Degree

In addition, there were two hospital diploma programs, two certificate programs in Family Nurse Practitioner, and a certificate program in Nurse Midwifery.

By the conclusion of the project in 1982 several changes in programming had occurred. Project activities and goals as well as institutional objectives, professional goals and related events throughout the state all served to initiate

and/or facilitate change in nursing education programming, resulting in the following:

At the diploma/certificate level:

- One diploma program closed, and the other program announced its closing in 1983.
- One Family Nurse Practitioner certificate program was discontinued.

At the associate degree level:

- One program in an independent college announced its closing in 1982.
- One program opened in a state community college, and another program in an independent college.
- Practical nurse graduates of the Kentucky Department of Education programs can be given transfer credit for entry into the University of Kentucky Community College System associate degree nursing programs.

At the baccalaureate degree level:

- One generic program opened in an independent college.
- A state university closed a generic baccalaureate degree program (1980), opened a baccalaureate degree for RNs program (1978), and announced the re-opening of the generic baccalaureate program in 1983.
- One independent college opened a baccalaureate degree for RNs program in 1982.
- One state university having a generic baccalaureate degree program conducted a special outreach program for registered nurse students and subsequently developed a curriculum track within the generic program for the RN students.

At the master's degree level:

- The established graduate program at the state university was extended to three outreach sites at three regional (state) universities.
- A second master's degree program at a state university was opened (1978).
- A third, single track master's degree program was opened (1981) in a state university located in an underserved area of the State.

At the time of this writing there are a total of thirty-four nursing programs in institutions of higher education available in Kentucky:

.20 Associate Degree
. 5 Generic Baccalaureate Degree
. 6 Baccalaureate Degree for RNs
. 3 Master's Degree

Anticipated changes for 1983 will increase this number to 35 with the re-opening of a generic baccalaureate degree program. In addition, the Frontier Nursing Service offers certificate programs in Family Nurse Practitioner and Nurse-Midwifery.

Nursing Conferences

The sharing of information and the expansion of the communication network have been considered an integral part of educational planning, and have been priority objectives since the inception of the project. Nursing education is rapidly being absorbed into the system of higher education and the nursing project was intended to facilitate this movement in Kentucky. In many ways this has been a social movement necessitating interpretation of language and purpose, change in direction, perception and understanding, and united leadership capable of facilitating desired change.

A conference for directors of nursing education programs and their institutional administrators was held in the Spring of 1979. Dual purposes were to share information concerning the nursing project and the state councils for state and independent colleges and universities; and, to identify issues and concerns in planning for nursing education from the perspective of the state and independent institutions. The issues and concerns identified related to the role and functions of the Council on Higher Education, statewide planning, the system of nursing education, accreditation, students, clinical facilities and continuing education. While many of the concerns cited dealt with internal program planning as well as the need for additional faculty and programs, one primary concern was funding for nursing education, basically an institutional problem.

Regional conferences for nursing service directors in hospital, nursing homes and community health agencies were held during the Spring months in 1981. These also were for the purpose of sharing information, principally about the goals and activities of the nursing project, and to identify critical issues in the practice of nursing which could be addressed through educational planning within the educational institution and/or the practice setting.

In the four regional conferences held, the following priority issues were identified:

A. For planning within the educational institution

1. Educational accessibility, particularly for employed nurses.

2. Increase number of BSN graduates.
3. There should be a greater difference in competencies of graduates of each type of program.
4. New graduates are unable to perform the technical skills needed in the hospital.
5. Expected outcomes of nursing education programs are not clear resulting in inconsistency in performance capability of graduates.
6. Education for students and faculty based on knowledge and skills needed in the real world of nursing.
7. Accountability and responsibility on the part of the new graduate in the practice setting.
8. Students need more clinical experience.
9. Difficult transition from education to practice.
10. Direct patient care not being viewed as a successful nursing career.

B. For planning within the practice setting:

1. Nursing service organization as a whole discourages the practice of nursing.
2. The need for cooperation/communication between nursing service and nursing education.
3. Lack of competency-based position descriptions to differentiate levels of practice.
4. Friction between doctors and nurses.
5. Nursing service must "sell" new ideas to staff. There is a lack of openness to new ideas.
6. Nurses' dissatisfaction in working environment.
7. Health care agencies are inconsistent in considering educational levels for nursing positions, even for the Director of Nursing position.
8. The status of nursing--poor image.
9. Different levels of educational preparation expected to function in the same role.
10. Recruitment; retention; inadequate salaries; lack of involvement in policy making and financial decisions in employing institutions; lack of communication within employing agencies.

The conferences for educators and nursing service administrators not only confirmed the need for an effective communication network but also confirmed the interest and committment of nurses in aggressively addressing the endless array of issues pertinent to nursing education.

Nursing Education Mini-Grant Program

In the Summer of 1981 the Kentucky Nursing Education Project offered a mini-grant program through which schools of nursing in Kentucky could contribute to a specific aspect of system development, i.e. faculty development, competency testing for advanced placement, through a project of their own design. Mini-grant project grants in the amount of $800.00 were to be awarded on the basis of the pertinency and perceived value of proposed mini-projects to nursing education system development. (Council on Higher Education, Nursing Education Mini-Grant Program, 1982).

Five mini-grant projects were conducted, one in an independent college and four in state universities. These projects individually addressed:

- Role incongruency regarding the expected and prepared role of the associate degree graduate as perceived by nursing educators; associate degree nurses, doctors and nursing administrators;
- The development of clinical competency examinations for advanced placement of registered nurse students in a generic baccalaureate degree program;
- The development of a performance evaluation tool to measure mastery of nursing actions specific to a beginning course in nursing;
- A faculty development workshop series pertaining to curriculum development, clinical evaluation of students, total program evaluation, tests and measurements, selection of appropriate learning experiences, and, legal aspects of faculty-student relationships; and,
- Development and beginning implementation of a model for a baccalaureate degree outreach program,

The projects provide further evidence of a professional responsibility and committment to research, intergroup communication, and continuing development of an educational system of quality.

Delineation Study of Nursing

During the nursing project period a recurring theme arising at nursing conferences and other meetings has pertained to the lack of or unclear differentiation of competencies of the various levels of nursing education program graduates. Although the expected competencies of nurse graduates

have been described in terms of educational level differentiation by professional groups at the national, regional and state levels, as well as by individual schools of nursing, there has remained uncertainty about precisely what new graduates are prepared to do in the practice field. As nursing practice becomes more complex, specialized and diversified, the importance of clear and mutual understanding of nursing competencies among nurse educators, employers of nurses, the public and relevant others becomes paramount.

A method by which the discipline of nursing could be delineated in depth for inclusion in the nursing project became available through Council staff involved in a concurrent project for the allied health disciplines. This was the Health Services Mobility Study (Gilpatrick, 1977) model, adapted for computer use by Council staff, and used in delineation studies of the respiratory therapy and dietetics/nutrition disciplines. The model is designed to clearly and explicitly delineate all the tasks[1] and elements of the tasks of a given discipline, identify the knowledge and skills required to perform each task, and distinguish the educational preparation levels appropriate for each task.

The delineation study of nursing began in September, 1981 with the selection of a nineteen-member discipline task group having expertise in the major categories of nursing practice: administration, education, research and clinical practice. Their function has been to describe the tasks of nursing, identify the knowledge and skills necessary to perform each task, determine the level of complexity of each knowledge and skill identified, and determine, through computer analysis, the appropriate matching of tasks, knowledge and skills to levels of educational preparation.

The results of this delineation study are expected to provide direction for curriculum development and articulation, for educational system planning, and for nurse utilization, formulation of job descriptions and improving the quality of care in practice settings. The study has the potential for influencing nurse certification and licensure legislation, planning for nursing manpower requirements, nursing research, and, the future development of the nursing discipline.

At the time of this writing the nursing delineation study is nearing completion. Details of the study, its findings and recommendations, are forthcoming in three Council on Higher Education publications:

Nursing Delineation Study

Vol. 1: Methods Report
Vol. 2: Report of Results
Vol. 3: Summary and Recommendations

[1] Gilpatrick defines a task as a series of work activities (elements) which are needed to produce an identifiable output that can be independently consumed or used, or that can be used as an input in a further stage of production by an individual who may or may not be the performer of the task.

Continuing Education

The popularity and necessity of continuing education for nurses represent a matrix of attitudes--commitment to the concept of lifelong learning, integrity in practice, the challenge of change, acceptance of a new world of nursing evolving. The progressive expansion of the supply and demand factors of continuing education over the past decade had not escaped the vision of the Ad Hoc Study Group on Nursing when, in 1975, they recommended that a statewide system for continuing education be developed for nurses in Kentucky. The need was there.

As an objective of the nursing project, the development of a system for continuing education has been elusive. Inhibited by time, progress has been made in frog-like hops and leaps but with the objective still in foreward view.

In 1978 a Subcommittee member task force began formulating a skeletal framework for a coordinated network of continuing education planner and provider representatives at the state, regional and local levels. The belief that continuing education was the responsibility of the nursing profession was pervasive and by 1980 many individuals and organizations were involved in considering the logistics and ramifications of a statewide system. The limitations of time prohibited broad developmental steps, although continuing education planners engaged in coordinated planning at local levels and between educational institutions.

In the meantime mandatory continuing education for relicensure of nurses was legislated by the Kentucky General Assembly in 1978, effective beginning in 1982. In an effort to facilitate the transition from voluntary to mandatory continuing education, a Teleconference on continuing education was planned in collaboration with the Kentucky Telecommunications Consortia, Kentucky Educational Television, nursing organizations and colleges and universities throughout Kentucky.

On January 20, 1979 the two-hour open-circuit Teleconference was presented. Nurse panelists discussed the conditions, events and professional involvement which led to mandatory continuing education, and responded to viewer questions phoned into the studio on a toll free line regarding continuing education. Thirty-six viewing sites had been organized in hospitals, colleges and universities throughout Kentucky and a total of 427 nurses participated in these group sessions. Over 300 questions were submitted to studio panelists with the majority of questions concerning forthcoming regulations governing continuing education and licensure.

In conjunction with the Teleconference, viewers were asked to participate in a survey to identify their individual needs and preferences regarding continuing education offerings. A total of 405 registered nurses and 112 licensed practical nurses responded to the survey questionnaire. Profiles of these two groups of nurses showed that:

.The majority worked full-time in hospitals in staff nurse positions,
.had practiced nursing from one to fourteen years,

.were graduates of hospital diploma and practical nurse programs,
.had graduated between 1961 and 1978, and
.were in the age group of 18 to 50.

Learning needs expressed by survey participants were organized into major categories of content. The top five categories of learning needs of registered nurses were:

1. Administration/management (33%)
2. Drugs (28%)
3. Education (24%)
4. Cardiac Care (21%)
5. Nursing Practice Skills (20%)

The top five categories of learning needs of licensed practical nurses were:

1. Drugs (33%)
2. Emergency Care (33%)
3. Nursing Practice Skills (28%)
4. Cardiac Care (25%)
5. Psychiatric-Mental Health Nursing (19%)

Since the enactment of mandatory continuing education for nurse relicensure, the number of providers and offerings have increased significantly. The development of a coordinated statewide system for continuing education remains a goal. The need is to assure the availability of continuing education to all nurses throughout the State without unnecessary duplication of offerings, and offerings appropriate to the learning needs of the individual nurse.

Approaching the evaluative process from the perspective of achievement of the primary goal of the nursing project--developing and implementing a coordinated statewide system of nursing education--presents the factor of prematurity. The system envisioned and described has specific qualities which, when translated in terms of goals, provide a framework from which evaluative criteria can be derived and achievement measured. Realistically however, evaluation remains on a continuum since a dynamic system will remain in a state of "becoming" rather than reach an end state of achievement.

Evaluation of the nursing project then is, of necessity, approached from the perspectives of progress toward primary goals and achievement of objectives supportive of major goals as represented in project studies and other activities. A secondary approach to evaluation has been ongoing. Each process and activity represented in, or generated by, the system design has been subjected to the management principle of control--measuring the results of one phase of a process against specified criteria and correcting any discrepancies before proceeding to the next phase of the process.

An overall evaluation of the nursing project is presented as follows.

Organizational Base

The Council on Higher Education has been an appropriate agency to sponsor a statewide project for nursing education. Having statutory authority and responsibility for overall planning and coordination of state-supported nursing education, the Council on Higher Education also has the support services and liaison relationships necessary to effectively implement plans. With the termination of the nursing project grant period, the Council is committed to a continuation of nursing education system development and facilitation of the developmental processes established.

The Subcommittee on Nursing Education has demonstrated the effectiveness of an interorganizational professional group in planning, implementing and coordinating the objectives of a system of nursing education. Serving as the hub of the communication network, the Subcommittee has distinguished itself in fostering positive and productive growth of this network and a climate of mutual trust and respect so necessary for statewide planning.

In September 1980, the halfway point of the project, the Subcommittee members gave their opinions about the project and their role in it: (two points of clarification: 1) The project director served as acting chairman of the Subcommittee during the project period, and 2) at the time of this opinion

survey, new members joined the committee:

SUMMARY
OF
OPINION SURVEY
of
Subcommittee on Nursing Education

SA - Strongly Agree
A - Agree
U - Undecided
D - Disagree
SD - Strongly Disagree

STATEMENTS	TOTAL = %					TOTAL = N				
	SA	A	U	D	SD	SA	A	U	D	SD
1. In this committee, the charge of the group would be better served by a committee member serving as chairman.		11.7%	11.7%	35.3%	41.2%		2	2	6	7
2. Committee membership should include some non-nurses.	16.6%	44.4%	5.5%	27.8%	5.5%	3	8	1	5	1
3. A committee of this type is not necessary for statewide planning in nursing education.				5.5%	94.4%				1	17
4. An advisory role is appropriate for this committee.	33.3%	33.3%	11.1%	11.1%	11.1%	6	6	2	2	2
5. Statewide coordination of nursing education is an important goal.	66.6%	33.3%				12	6			
6. Interorganizational communication has improved as a result of committee activities.	16.6%	55.5%	16.3%	11.1%		3	10	3	2	
7. Committee members should not be asked to serve on project-related technical advisory groups.			11.1%	44.4%	44.4%			2	8	8
8. Project activities have little or no adaptability to similar projects in other states.			11.1%	61.1%	27.8%			2	11	5
9. As a member of this committee, I feel impotent in facilitating progress toward project goals.		22.2%	11.1%	50.0%	16.6%		4	2	9	3
10. Project goals are clearly understood by the committee.		66.6%	22.2%	11.1%			12	4	2	
11. Project goals are suitable for Kentucky.	22.2%	72.2%	5.5%			4	13	1		
12. Project goals are not achievable in Kentucky.			16.6%	55.5%	27.8%			3	10	5
13. State policies for higher education are appropriate for nursing education.	5.9%	47.0%	35.3%	5.5%	5.5%	1	8	6	1	1
14. The concept of a statewide system of nursing education is unacceptable to nurse educators in Kentucky	5.9%	11.7%	5.9%	47.0%	29.4%	1	2	1	8	5
15. In Kentucky, this committee is generally perceived as providing leadership in statewide planning for nursing education by:										
a. nurse educators	27.8%	50.0%	16.7%		5.5%	5	9	3		1
b. other nurses	5.5%	27.8%	38.9%	22.2%	5.5%	1	5	7	4	1
c. hospital administrators		50.0%	22.2%	16.7%	11.1%		9	4	3	2
d. other health discipline educators		38.9%	44.4%	11.1%	5.5%		7	8	2	1
e. higher education administration	5.5%	50.0%	33.3%	5.5%	5.5%	1	9	6	1	1
16. Committee meetings have been a valuable use of my time.	33.3%	50.0%	16.6%			6	9	3		

It is anticipated that the Subcommittee on Nursing Education will continue as a viable group with the capacity and function of providing leadership and continuity in the continuing development of the nursing education system in Kentucky.

Nursing Manpower Licensure Analysis

The data derived from this analysis have been widely used since 1979. Their value has been self-evident to educators, hospital planners and project staff who have utilized these data for decision making purposes.

The effectiveness of this assessment process is measured by its value in use and by the intent of the Kentucky State Board of Nursing and the Council on Higher Education to continue the analysis process. The extensive amount of data analysis regarding practical nurses and registered nurses licensed in Kentucky from 1979 through 1981 provides an excellent base for mapping trends in the nursing manpower pool and identifying those which have implications for educational planning.

Kentucky Nursing Manpower Requirements and Resource Study

This study has been responsive to questions basic to a nursing education system which has the potential of meeting nursing manpower needs in Kentucky: how many nurses will be needed--what types--what mix--and are resources sufficient to meet those needs. The study is based on a well-researched model and is specific to Kentucky. Any evaluation of its effectiveness in providing direction for and facilitating change in nursing education and nursing service must be done after changes are noted.

The study has also provided two working hypotheses for nursing research: staffing criteria for practice settings, and, the educational mix of nurses specific to given practice settings. Health care service institutions are necessary settings for research in nursing practice and suggested criteria for nursing service staffing, such as those derived from the nursing manpower requirements study, should be validated through planned, objective research.

Nursing Program Survey

The survey of nursing programs has identified differences in policies and practices concerning academic mobility for nursing students and problems affecting enrollment. It has also provided a profile of individuals who seek admission to nursing programs, those who enroll and those who graduate. The survey questionnaire served the purpose for which it was designed, but continued use would enhance the data base for nursing education. At this time, the full value of this type of program survey has not been realized.

Nursing Conferences

The 1979 conference for directors of nursing education programs and their institutional administrators was possibly premature. The statewide

communication network, the avenue through which statewide planning for nursing education could be facilitated, was minimally developed. The conference reflected a need for increased and mutual understanding of the goals and languages of nursing education and higher education, and participant evaluations supported this observation.

The objectives of the 1981 regional conferences for nursing service administrative personnel were achieved in that issues in nursing practice having implications for educational planning were identified by conference participants. These four conferences were identical in that each conference offered information about the nursing project and permitted group discussion regarding identified issues and recommendations.

A total of 73 nurses representing hospitals, nursing homes, home health agencies and other health agencies attended these regional conferences. Of this number 82 percent evaluated the achievement of conference objectives:

Degree of Accomplishment of Conference Objectives as Related by Conference Participants

Conference Objectives	Degree of Accomplishment (Percentages)							
	Very High 0	1	2	3	4	5	6	Not at All 7
A. KNEP INFORMATION								
1. Describe the role of the Council on Higher Ed.	27	18	27	18	8	2		
2. Describe the relationship of nursing education to the system of higher education.	17	32	27	14	8	2		
3. Describe the historical foundation of KNEP.	23	25	25	22	5			
4. Describe the concept of levels of education/practice.	17	27	23	18	5	7	3	
5. Describe the system of nursing education in Kentucky.	10	19	27	31	8	2	3	
6. Identify the planning/coordinating mechanism for nursing education.	9	22	24	31	14			
7. Identify KNEP objectives.	17	27	23	28	3	2		
8. Describe the current status of KNEP.	12	28	19	29	7	5		
B. GROUP DISCUSSIONS								
1. Identify the critical issues in the practice of nursing which can be addressed through nursing education.	24	37	29	10				
2. Identify the critical issues in the practice of nursing which can be addressed within the practice setting.	21	32	32	11	4			
3. Draft recommendations for the resolution of critical issues.	19	28	33	12	7			
C. NOMINAL GROUP PROCESS								
1. Explain nominal group process.	19	36	17	23	6			
2. Have each group member identify a critical issue.	25	42	20	11	2			
3. Have group select Top Three priority issues.	19	38	17	15	6			6
4. Have each group member recommend a possible solution to critical issues.	22	34	16	22	5			

Many participants viewed the conferences as leading to a closer relationship and better understanding between nursing education and nursing service, as indeed the conferences were intended to do.

Nursing Education Mini-Grant Program

This program offered nurse educators the opportunity to conduct research pertinent to the nursing education system, and the results of their efforts add to the knowledge base for nursing in Kentucky. The one non-research project, the faculty development workshop series, was given a high rating by participants, and by popular demand additional workshops were planned and scheduled.

Delineation Study of Nursing

The effectiveness of this extensive study in terms of influencing nursing education and nursing service will not be known until the study is completed, the results shared, and effect measured. The study holds promise as a research effort significant to nursing.

For the members of the study task force, the study has provided a unique and valuable experience. Their critique of the study methodology and their participation in it is reflected in the following participant statements made when the study had been underway for eleven months: (from draft of Vol. 1, Nursing Delineation Study.)

Approach to Nursing

Strengths	Limitations
The study provided the opportunity to look at various facets of nursing, i.e., administration, education, practice and research.	Defining nursing in terms of of tasks may be misleading to anyone not involved in the Study. "Tasks" as the focus of the study implies technology, despite the fact that to care, to nurture and to carry out other emotional dimensions inherent in nursing are also tasks.
An objective approach was able to be used to define what is included in the complex profession of nursing and to identify what skill and knowledge are needed for the various aspects.	The data generated were based on one geographic region; the universality of the approach in nursing is uncertain at this point.
Cognitive, technical and affective activities in nursing may be addressed using the study criteria for identifying and describing tasks and recognizing the skill and knowledge requirements.	It seemed disturbing to consider skill and knowledge needed to perform tasks competently and not to consider operational knowledge which is desirable but not necessary. It seemed minimal nursing care was described and not the best nursing has to offer.
Although the term "task" often portrays a technical emphasis, its application in this study was very broad in nature.	
The overall study recognized the need to identify the nursing needs within the state.	

The findings from the volume of data able to be generated by this format have major implications for nursing.

Task Force Representation

Strengths

The diversity of members from various backgrounds provided a wide variety of expertise, experience and representation from administration, education, practice and research. This is often not the case in nursing research.

The majority (80%) of the members who started the study were active throughout the process and were willing to devote personal time to the study.

The group was able to work together for a common goal.

Limitations

The overall make up of the task force was representative, however, all group members come with the biases of their education and experiences and are sure to affect almost all areas of the study.

With the large magnitude of the study, even a 20% attrition rate affected the enthusiasm of those who remained.

Representation from other areas in practice and educational settings would be needed to refine the preliminary results.

A project of this magnitude requires a broader base and input from those members of the profession actually involved in "hands-on care" of clients (both patients and students).

Logistics/Orientation to Study

Strengths

A formal request was made to employers for participants to become actively involved in monthly meetings and additional activities.

Direction and organization of the study was the responsibility of an individual who had previously used and was knowledgeable about the methodology.

Working in small groups expedited the task analysis process.

Specific time was allocated for monthly meetings.

Limitations

The small groups did not always meet together. This physical separation may show up in a varied use of the method.

There was no concentrated period at beginning of the study devoted to presenting a more detailed overview of the methodology (including final data analysis.) More frequent meetings were not planned throughout the study to meet original timetable deadlines.

The scope of the methodology was not realized until its implementation was well underway. Therefore, an excessive amount of time was spent writing and rewriting task descriptions.

A year was not enough time to complete the study without releasing participants from regular duties.

It was necessary to reorient oneself each time the study was worked on. This took a great deal of time and made it very difficult to work independently.

Process

Strengths

The step-by-step process provided an objective look at a complex discipline that presently is not well defined.

The availability of the method provided direction and focus for the group.

The method encouraged group members to validate one another's work.

Establishing deadline dates for various steps of the method helped to accomplish even the preliminary results.

Individuals followed through on the entire method for their assigned group of tasks.

Sharing ideas from a group approach allowed for individual stimulation.

The method allowed for the use of a framework (of nursing) to be designed to recognize the definite volume of work necessary for each individual.

Computer analysis allows multiple methods of examining task data.

The method design was excellent for looking at skill and knowledge requirements by degree.

Final results will produce curriculum designs and job descriptions at various levels.

The method kept a group of nurses with widely varied backgrounds focused on the study and demanded analysis of activities being described and assignment of a value or weight to it.

Limitations

There was not enough time to thoroughly search the literature for tasks and descriptions.

Tasks are defined with varying degrees of specificity.

Standard definitions of terms were not fully developed nor utilized.

The Knowledge Classification System needed additional categories added to it to make it more representative (e.g., of humanities, nursing, caring.)

The skill and knowledge scales were not critiqued by the group before using them.

The knowledge and skill scales were well defined but allowed a great deal of subjectivity. However, adjustments for more objectivity may be difficult.

Application of "Task"

Strengths

Tasks were generally not described as procedures.

A representative sample of tasks in nursing was generated.

Technical as well as other types of activities could be defined by applying the guidelines for writing tasks.

The use of the term "as appropriate" could be used to indicate where a judgement was necessary to carry out the task elements.

The amount of detail in the task descriptions to convey the use of the skill and knowledge necessary to perform the task in any given setting.

Limitations

It was necessary to broaden the scope of the task descriptions due to the large volume of tasks, especially if the definition of "tasks" was to be strictly followed.

Not all tasks were able to be written due to time limitations; the tasks that were written probably tend to be more technical because they're easier to write than those pertaining to psychological and emotional support, etc.

The word "task" may not be the best term to use.

Determining how global or specific the criteria for identifying tasks are to be applied should be addressed at the beginning of the study. However, this as well as common use of terms and other decisions were difficult to make until the method had been used and understood by the participants.

Describing attitudes using the guidelines for writing tasks was difficult.

The decision and/or planning to perform a task became a separate task from actually carrying out the activity.

Benchmark tasks were not identified by the entire group, limiting the reliability of how tasks were written.

It was difficult to determine how to describe tasks and judgements therein, universally rather than in relation to specific settings.

Continuing Education

The Teleconference on Continuing Education for Nurses represented extensive and coordinated planning among many individuals from major facets of the nursing and education professions. The implementation of the plan, from the television studio to the many viewing sites, demonstrated teamwork at its finest. Evaluation of the teleconference is perhaps best expressed in these viewer comments:

NURSE COMMENTS

"The quality of the presentation was outstanding."

"Congratulations! I think the Teleconference on Saturday went exceptionally well and want to add my compliments to those I'm sure you are receiving from many grateful nurses in the Commonwealth."

"I feel that the individuals at our viewing site benefited from the Teleconference. They asked a lot of questions, and seemed to have appreciated the information received."

"From my perspective the Teleconference went exceptionally well. Participants were very interested and enthusiastic."

"This Teleconference was a marvelous idea and I would like to see us have another one within the next year."

"Those persons who attended at our viewing site were highly motivated and found the experience valuable."

"It is clear that the Teleconference worked."

"The nurses enjoyed the phone-in aspect of the Teleconference. They also benefited greatly from simply being together to discuss the topic."

"Our local viewing site was pleased with the Teleconference."

"Our institution is glad to have a part in this first Teleconference."

"It is a great value to us in keeping up with our constant changes just in our field, which is basically what continuing education is all about."

"Congratulations to you and many others for producing a successful "first" in the State of Kentucky."

"The program was excellent and most informative."

"Appreciated the manner in which all of the participants conducted themselves. Let's get clout!"

"I found the conference interesting and stimulating."

"I felt this program beneficial and hope for repeat performance in disseminating professional information to "the masses"."

"I found the program to be of great benefit."

"The Teleconference was an excellent way to inform the nurses of Kentucky about a very important but currently confusing topic - continuing education and relicensure. The program host is to be complimented on her skill in directing the questions, in summarizing responses and in her knowledge of some of the problem areas in continuing education for nurses. Please use this experience and listener's responses to schedule more of this type for nurses."

"The Teleconference on Continuing Education for Nurses was super! The program was well planned, well presented and most informative."

"I find the things happening with continuing education for nurses in Kentucky very worthwhile."

"I found the program to be informative in many ways and am glad it was televised. Thank you very much."

"It was an informative program and I found it very well done. That was the consensus of the nurses with whom I discussed it afterwards too."

"We enjoyed being able to participate in the Teleconference. Please keep us notified of any future activities that are planned."

"I would like to thank the Council on Higher Education for having the Teleconference. I felt it was informative, provoking a lot of questions."

"I definitely felt that this was a valuable conference and see it as an innovative technique for getting information to and participation from the nurses in the "outer areas" of the Commonwealth."

"Many people expressed an interest for other such conferences. I commend all involved for an outstanding view of dynamic nurses in action to improve their profession."

"I saw your Teleconference on Continuing Education and am excited about the program, but especially how much PBS can do in sharing information - CLEARLY - to a widespread population of our profession. I marvel at how we could all learn the same kinds of things all at once, and how we could be so universal in our knowledge."

"The moderator was excellent and it was obvious she had done her preparation."

"The program was very good."

"I viewed the entire 2 hours in my home and found the program very informative."

"Very excellent Nursing Teleconference."

"I enjoyed the Teleconference on T.V. very much."

"Thought it very good."

"I learned so much but would like to show it to my LPN organization at our next meeting."

"Very interesting program."

"The Teleconference program has been very informing and I appreciate the opportunity of seeing and learning from it."

"The Teleconference was very informative."

"The Teleconference presented yesterday will certainly go down in the history of Kentucky nursing as a well-organized, informative step forward for our profession. I was proud to feel a part of the effort even though I was only an observer."

"This is one good way to relay messages to all registered and practical nurses."

"The program was impressive and most informative."

"I would like to extend my appreciation of the Teleconference on Continuing Education. It was very informative and answered many of my questions and those I have heard expressed by other nurses."

"I thought it was very interesting and helpful."

"It was informative and I felt the selected speakers were good representatives for their agencies."

"The Teleconference was most informative. Also, nurses were able to see and hear nursing leaders in Kentucky, and to know that these leaders are really interested in the needs of all Kentucky nurses. I was impressed with the technical quality of the visual aids. The information was concise and well organized, and the data clearly visible."

"The program was well organized and very beneficial for all of us."

"I feel that many questions were answered and that this media is certainly an excellent way to communicate to the large body of nurses in Kentucky."

The survey of learning needs which accompanied the Teleconference was equally effective as measured by participant response. The results of the survey were subsequently reported at a state conference on continuing education.

Southern Regional Education Board Evaluation

It will be recalled that the Kentucky Nursing Education Project has had a direct relationship to the SREB Nursing Curriculum Project by goals and objectives and by the funding mechanism. On November 20, 1981 the Kentucky project received the following final evaluation from the SREB Nursing Curriculum Project evaluator:

Criteria	Evaluation Comment
1. Relevance of objectives to NCP and its assumptions:	1. Directly related to needs of a state to determine needs, resources and supply with respect to nursing.
2. Consistency of project activities with objectives:	2. Quite.

3. Soundness of evaluation methods and their probable effectiveness in getting at outcomes:	3. The proof of the "pudding" is the current and eventual impact of their interrelated information system on policy and institutional changes. It appears that such changes are already taking place and are likely to continue.
4. Impact of project in institution/community ("spread effect"):	4. More cooperation between state an independent programs. Indication of significant impact on various curricula.
5. Productivity of project:	5. Outstanding.
6. Liklihood of continuation of project after termination of grant:	6. The systems and procedures which have been developed appear to be amenable tc being continued.
7. Qualifications of project personnel and involved faculty:	7. Outstanding.
8. Benefits of projects related to costs:	8. The information systems developed and refined would justify expended funds, but with enhanced communication and cooperation, the project has been very cost-effective.

Summary Evaluation

In summary, the Kentucky Nursing Education Project has addressed the issues identified in 1975 by the Ad Hoc Study Group on Nursing. The various elements of this multi-faceted project have stimulated nurses and other organizational representatives to address educational problems and nursing practice issues which have implications for educational planning. Without question, the project has been instrumental in developing respect and trust amongst individuals representing the health care and educational systems which, in turn, have made cooperative and coordinated planning possible.

Recommendations Based on a Summation of Project Effectiveness:

1. The mechanisms for reaching the primary goal of developing, implementing and evaluating a coordinated statewide system for nursing education in Kentucky should be continued.

2. The activities generated by the project which should be continued include:

   a. A planning, coordinating body to specifically address nursing and having statewide representation of:

      (1) nursing education in public and independent institutions,
      (2) nursing service,
      (3) continuing education in nursing,
      (4) governmental and regulatory agencies, and
      (5) health professional associations;

   b. Annual analysis of nursing licensure data;
   c. Annual survey of nursing programs in public and independent institutions;
   d. Five-year projections of nursing manpower requirements and resources; and,
   e. Review and refinement of the nursing delineation study.

Recommendations Based on the Study of Nursing Manpower Requirements and Resources

1. The full-time equivalent employed (in nursing) registered nurse population for Kentucky should increase by 4,136.4 RNs for a total of 20,087.4 RNs with proportionate educational representation of:

   42.2% Associate Degree/Hospital Diploma,
   37.4% Baccalaureate Degree, and
   20.3% Masters and Doctoral Degrees.

   This will result in a statewide ratio of 1 BSN RN:1.12 ADN/DIP RN, and 1 BSN RN: 0.54 MSN/DOCT RN.

2. The number of FTE employed registered nurses prepared at the baccalaureate in nursing degree level should be increased by 64 percent (4,836.1 RNs) by 1985:

   a. Baccalaureate degree programs which are established and nationally accredited should initiate or expand outreach (satellite) programs in appropriate geographical areas of Kentucky. Such programs should demonstrate the same standards of quality as the parent program and be funded accordingly.

   b. Baccalaureate degree nursing programs having less than capacity enrollment should identify causative factors and initiate appropriate remedial measures.

   c. Baccalaureate degree nursing programs that are operating at maximum capacity by virtue of funding limitations should seek the resources necessary for expansion of student enrollment.

   d. Articulation agreements between associate degree and baccalaureate degree nursing programs should be established to foster and facilitate educational mobility for the associate degree nurse graduate.

   e. Baccalaureate degree programs should seek interinstitutional uniformity of policies and practices to foster and facilitate the educational mobility of the hospital diploma-prepared registered nurse.

   f. Baccalaureate degree programs should seek alliances with rural hospitals designed to enrich student clinical experience, encourage educational advancement of nurses and foster utilization of registered nurses prepared at the baccalaureate degree level.

   g. Health facilities which employ registered nurses should establish policies and develop plans that facilitate educational advancement of nurse employees and enhance recruitment and retention of nurses.

3. The number of FTE employed registered nurses prepared at the masters and doctoral degree levels should be increased by 74 percent (3,009.4 RNs) by 1985.

   a. The University of Kentucky College of Nursing should continue to expand its outreach masters degree nursing program in appropriate geographical areas of Kentucky.

   b. Alternatives for increasing the number of doctorally prepared nurses should be explored, including development of a doctoral program at the University of Kentucky and/or expanding common market opportunities.

   c. Educational and health care facilities having nursing positions for which masters or doctoral degree preparation is indicated should establish policies and develop plans that facilitate educational advancement of nurse employees.

d. The institutions offering graduate programs in nursing should explore innovative strategies for curriculum implementation that conserve limited nursing faculty resources without jeopardy to the quality and integrity of nursing education.

4. The number of FTE employed registered nurses prepared at the associate degree and hospital diploma levels should be reduced by 43.8 percent (3,709.0 RNs by 1985.

a. Associate degree programs which have relatively small enrollments and/or graduating classes and are within reasonable geographic proximity of another associate degree program of similar or larger size should be merged with that program.

b. A moratorium should be placed on the development of new associate degree and/or hospital diploma nursing programs.

c. Universities having both associate degree and baccalaureate degree programs should consider the feasibility of offering the baccalaureate degree program only under a curriculum plan which accomodates generic as well as registered nurse students.

5. The number of FTE employed licensed practical nurses should be reduced by 63 percent (2,663.7 LPNs) with a desired ratio of 4.76 RNs: 1 LPN by 1985:

a. A moratorium should be placed on the development of new practical nurse programs.

b. Articulation agreements between practical nursing and associate degree programs should be established to foster and facilitate educational mobility for the practical nursing program graduate.

c. Enrollment in practical nurse programs should be decreased and expansion of existing programs through outreach sites should be discouraged.

d. A research study to determine if continuance of practical nurse education is warranted in terms of cost-effectiveness and product utilization in the health care system should be initiated by vocational and higher education nurse educators and representatives of the health care system.

6. Avenues of financial assistance should be increased for individuals seeking entry into nursing education programs at both beginning and advanced levels:

a. Access of individuals to nursing education should be routinely examined to determine if rural nursing scholarship programs comparable to rural dental and medical scholarship programs are warranted.

b. Local communities should initiate and participate in planning that extends nursing practice capabilities in effectively meeting the health care needs of the community.

7. Health care and educational system policies and practices should endorse and facilitate congruency between the preparation of nurses and the responsibilities they assume in their practice of nursing.

   a. Employers of nurses should establish employment credential standards for nursing positions that are commensurate with the responsibilities of the position.

   b. Employers of nurses should encourage and facilitate educational advancement of nursing employees for purposes of promotion and/or equivalency of employee preparation/position responsibilities.

   c. Nurse educators and nursing service personnel should jointly establish a communication network and strategies that promote mutual knowledge and understanding of nursing education objectives, nursing service goals and the knowledge and skills essential to competent practice in the diverse nursing roles within the health care system.

   d. Health care professional associations should endorse and facilitate utilization of nursing personnel appropriate to preparation.

   e. Health care agencies should develop plans whereby the parameters of nursing expertise can be expanded to needed sectors of the health care delivery system, i.e. consultative services, consortia arrangements for inservice education, etc.

8. The Kentucky Nursing Manpower Requirements and Resources models should be subjected to continuing research and appropriate change for repetitive implementation in future years.

   a. Employers and educators of nurses should encourage and engage in research studies regarding effective nurse staffing patterns and utilization of nurses commensurate with preparation.

   b. Health care agencies should standardize and expand the utilization data pertinent to nursing manpower requirements planning.

Recommendations Based on the 1981 Nursing Program Survey:

1. A survey of nursing programs regarding their applicants, students, graduates and relevant policies and practices should be conducted annually to identify trends and problem areas pertinent to the nursing education system.

2. Schools of nursing should routinely and systematically examine nursing program survey data and initiate remedial action for trends and problems that inhibit effective growth and development of the nursing education system.

3. Schools of nursing should seek interprogram uniformity of policies and practices that facilitate educational mobility of nursing program applicants and students.

Recommendations Based on Methods Report of the Nursing Delineation Study:

1. The results of the study (as presented in Volume 2 - 1982) should be considered representative of nursing and the study should be continued with a broader, more comprehensive Task Force membership.

2. Existing task descriptions from each of the areas (i.e., administration, education, practice, research) should be compared for their scope and application of task criteria and be tested for reliability among the four areas.

3. In further defining nursing by continuing the study, a consensus should be reached about whether what has been defined is optimal care versus requirements for competent care.

4. The study should be replicated and organized according to the process of administration, education, practice, and research.

5. The collegial interaction of the Task Force should remain in existence as a statewide forum with representation of the multiple areas of specialization.

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